920276-904613

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE THE APPLICATION OF:	Examiner: Khaled Brown
Paul Beard	Group Art Unit: 2877
Serial No: 10/088,322	Customer number: 23644
Filed: 06/11/02	
FOR: An Optical Inter Ferometer Sensor Array	

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450," on October 13, 2004.
Name of person signing Iris Perez
Signature

PETITION FOR EXTENSION OF TIME

Honorable Director of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. §1.136, the applicant hereby petitions for an automatic extension of time of 1 month to respond to the Office Action of June 30, 2004. Response will therefore be timely if filed with the Patent and Trademark Office no later than October 30, 2004.

In accordance with the provisions of 37 C.F.R. §1.17, the required fee of $55 is attached hereto.

October 13, 2004

Respectfully submitted,

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The examiner has then proceeded to reject the claims, with claims 1-8, 14 and 15 being rejected by the examiner as either being anticipated by, or obvious over, Monchalin, U.S. Patent Number 4,633,715. Claims 16-19 have also been rejected by the examiner on the basis of obviousness, with Monchalin being the primary reference. The remaining claims have not been rejected on the basis of the prior art. Reconsideration is requested, as it is submitted that the application, as claimed, adequately distinguishes from Monchalin, either taken alone or in combination with the other cited references.

The present invention allows the detection of an incident acoustic signal pattern over a two-dimensional area, as set out in the first paragraph of the specification. This is essentially by providing a polymer film and using laser interferometry on that polymer film to detect incident acoustic waves.

Claim 1 requires a two-dimensional sensor head comprising a polymer film of substantially uniform thickness disposed over a substrate. This polymer film is totally absent from Monchalin.

In contrast, in Monchalin there is no sensor head of polymer film to allow incident acoustic waves to change the thickness of the polymer film and therefore allow the thickness to be measured optically. Instead, ultra sound waves in a solid are measured by measuring the position of the surface of the solid using an optical technique.

Monchalin also fails to disclose a "two-dimensional sensor head", since there is no definable component that converts something to be measured into a detectable quantity. Instead, in Monchalin the whole system is used to carry out this function. Claim 1 and its dependent claims are thus submitted to be allowable.

Dealing with other arguments raised by the examiner:

Claim 2 - Monchalin describes a single photo detector, not a two-dimensional array.

Claims 4-6 - stand rejected for obviousness. However, the general conditions of the claims are not disclosed in the prior art - the polymer film is absent from Monchalin. Moreover, there is nothing in Monchalin that could lead the skilled person anywhere near the claimed ranges. Monchalin simply does not operate in the same way.

Claim 14 - There is no reasoning regarding this claim apart from the words "optical arrangement". Claim 14 requires an optical arrangement for altering the angle of incidence of interrogation signal on the sensor head, and is not found in Monchalin.

Claims 16 - Rao et al (US 6699717) discloses spin coated polymers sensing film to improve sensitivity. Rao et al does not actually state that sensitivity would be improved. Moreover, the polymer film sensor in Rao et al suggests adding a polymer film to an existing optical device to improve performance, whereas in the present invention the polymer film is required for the sensor to operate at all.

Claim 17 - it is noted that Shaw merely discloses flash evaporation for making a capacitor not a senor.

It is therefore submitted that the application is allowable, and further and favorable reconsideration is urged.

Respectfully submitted,

Date: October 13, 2004

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